

Maryland Historical Trust

Maryland Inventory of Historic Properties number: 6-11-C-363

Name: 11025/MD495 over branch of Casselman River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> A </u> <u> B </u> <u> C </u> <u> D </u> Considerations: <u> A </u> <u> B </u> <u> C </u> <u> D </u> <u> E </u> <u> F </u> <u> G </u> <u>None</u>	
Comments: _____ _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u> 3 April 2001 </u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u> 3 April 2001 </u>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. G-II-C-363

SHA Bridge No. 11025 Bridge name MD 495 over Branch of Casselman River

LOCATION:

Street/Road name and number [facility carried] MD 495

City/town Jennings

Vicinity _____

County Garrett

This bridge projects over: Road _____ Railway _____ Water X Land _____

Ownership: State X County _____ Municipal _____ Other _____

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes _____ No X

National Register-listed district _____ National Register-determined-eligible district _____

Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:

Timber Bridge _____:

Beam Bridge _____ Truss -Covered _____ Trestle _____ Timber-And-Concrete _____

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge _____:

Swing _____ Bascule Single Leaf _____ Bascule Multiple Leaf _____

Vertical Lift _____ Retractable _____ Pontoon _____

Metal Girder _____:

Rolled Girder _____ Rolled Girder Concrete Encased _____

Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete X:

Concrete Arch _____ Concrete Slab X Concrete Beam _____ Rigid Frame _____

Other _____ Type Name _____

DESCRIPTION:Setting: Urban _____ Small town _____ Rural X**Describe Setting:**

Bridge No. 11025 carries MD 495 over a branch of Casselman River in Jennings, Garrett County. MD 495 runs north-south, while the branch of Casselman River it crosses flows east into Pennsylvania. The area immediately around the bridge is sparsely developed with the Savage River State Forest located to the east and southeast.

Describe Superstructure and Substructure:

Bridge No. 11025 over a branch of Casselman River is a three span, two-lane, concrete slab bridge built in circa 1931. Although similar to SHA designs from 1930, this bridge does not conform to SHA Standard Detail Sheets. The channel span is 22'-0" and is flanked to the north and south by a 20'-8" span. Each pier is a 2' wide solid shaft, and each has been decorated with molded chamfering. The wingwalls are flared. The superstructure consists of the slab, the roadway, and open parapet walls. The clear roadway width is 27'-3", and the out-to-out is 29'-5". The parapet walls are 10" thick and 3'-4" in height with six panels. According to plans drawn by Northeast Engineering, Inc. in 1990, the bridge is approximately 70'-0" in length. The bridge has no posting.

Discuss Major Alterations:

There are no local or state records which indicate when repairs were made to this structure or the extent thereof.

HISTORY:

WHEN was the bridge built? _____ 1931 _____

This date is: Actual _____ Estimated X _____

Source of date: Plaque _____ Design plans _____ County bridge files/inspection form _____

Other (specify) Maryland State Highway Administration bridge files.**WHY was the bridge built?**

Unknown

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

Unknown

WAS this bridge built as part of an organized bridge-building campaign? Unknown

SURVEYOR/HISTORIAN ANALYSIS:

This the bridge may have National Register significance for its association with:

A - Events _____ B- Person _____

C- Engineering/architectural character X

Was the bridge constructed in response to significant events in Maryland or local history?

Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war-related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920 to 1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of \$3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund [with an equal sum from the counties] the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had become inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930s. Most improvements to local roads waited until the years after World War II.

With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction. In the early years, there was a need to replace the numerous single lane timber bridges, and the state responded by designing standard concrete slab bridges which could be constructed in all of its counties.

Walter Wilson Crosby, Chief Engineer stated in 1906, "The general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do away with the further expense of the maintenance of expensive and dangerous wooden structures". Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

The creation of standard plans and a description of their use was first announced in the 1912-15 Reports of the State Roads Commission whereby bridges spanning up to 36 feet were to use standardized designs.

Published on a single sheet, the 1912 Standard Plans included those structures that were amenable to such an approach: slab spans, (deck) girder spans, box culverts, box bridges, abutments, and piers (State Roads Commission 1912). Slab spans, with lengths of 6 to 16 feet in two foot increments, featured a solid parapet that was integrated into the slab, with a roadway of 22 feet.

In the Report for the years 1916-1919, a revision of the standard plans was noted:

During the four years covered by this report, it has been found necessary to revise our standard plans for culverts and bridges, to take care of the increased tonnage which they have been forced to carry. Army cantonments...increased their operations several hundred per cent, and the brunt of the enormous truck traffic resulting therefrom, was borne by the

State Roads of Maryland. In addition to these war activities, freight motor lines from Baltimore to Washington, Philadelphia, New York, and various points throughout Maryland, and the weight of many of these trucks when loaded, was in excess of the loads for which our early bridges were designed (State Roads Commission 1920:56).

Published on separate sheets, the new standard plans (State Roads Commission 1919) for slab bridges reveal that the major changes was an increase in roadway width from 22 feet to 24 feet and a redesign of the reinforcement. The slab spans continued to feature solid parapets integrated into the span. The range of span lengths remained 6 to 16 feet, but the next year (1920) witnessed the issue of a supplemental plan for a 20 foot long slab span (State Roads Commission 1920).

The 1924 standard plans remained in effect until 1930, when the roadway width for all standard plan bridges was increased to 27 feet in order to accommodate the increasing demands of automobile and truck traffic (State Roads Commission 1930). The range of span lengths remained the same, but there were some changes designed to increase load bearing capacities. The reinforcing bars were increased in thickness. Visually, the 1930 design can be distinguished from its predecessors by the pierced concrete railing that was introduced at this time.

Bridge No. 11025 is similar to SHA designs from 1930, but it does not conform to SHA Standard Detail Sheets. Built for local transportation needs over a comparatively wide crossing, it is possible this bridge design was modified from SHA designs for use at this site.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Unknown.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

No. Bridge No. 11025 is not located in an area which is eligible for historic designation.

Is the bridge a significant example of its type?

Yes. Bridge No. 11025 is a potentially significant example of a multiple-span concrete slab bridge. The bridge is unusually large, approximately 70' in length, and in comparison to other extant concrete slabs constructed in Maryland from 1920 to 1940, it is quite decorative in its design. The open parapets have six panels and an articulated concrete cap. The end blocks are panelled, and both the piers and wingwalls have been decorated with molded chamfering to give the appearance of natural stone.

Does bridge retain integrity of important elements described in Context Addendum?

Unknown.

Is bridge a significant example of the work of a manufacturer, designer and/or engineer?

Unknown.

Should bridge be given further study before an evaluation of its significance is made?

Yes, further evaluation is necessary to determine National Register significance. Moreover, additional research concerning the history of this bridge and its relationship to the surrounding landscape may be useful in providing a more complete picture of the bridge's background.

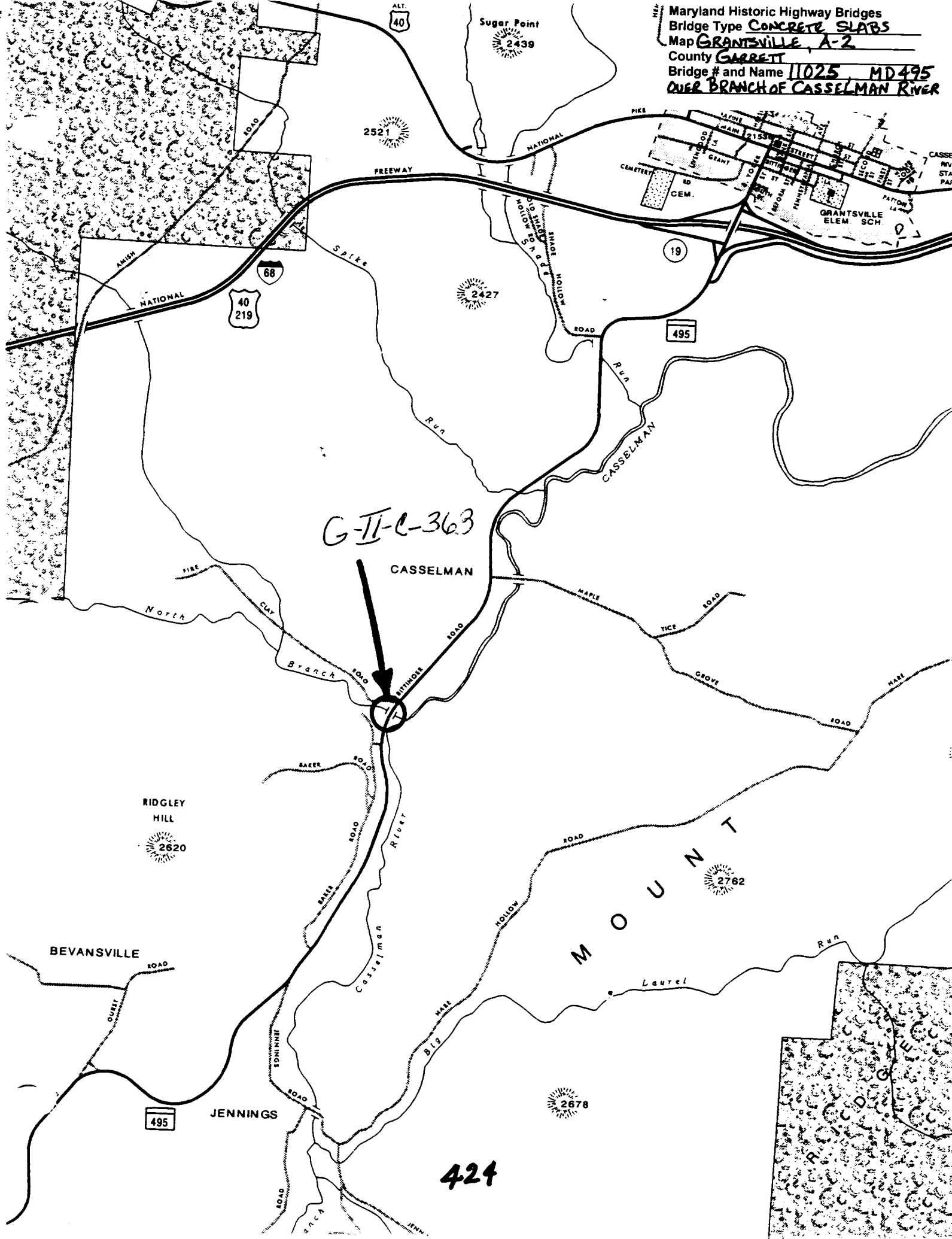
BIBLIOGRAPHY:

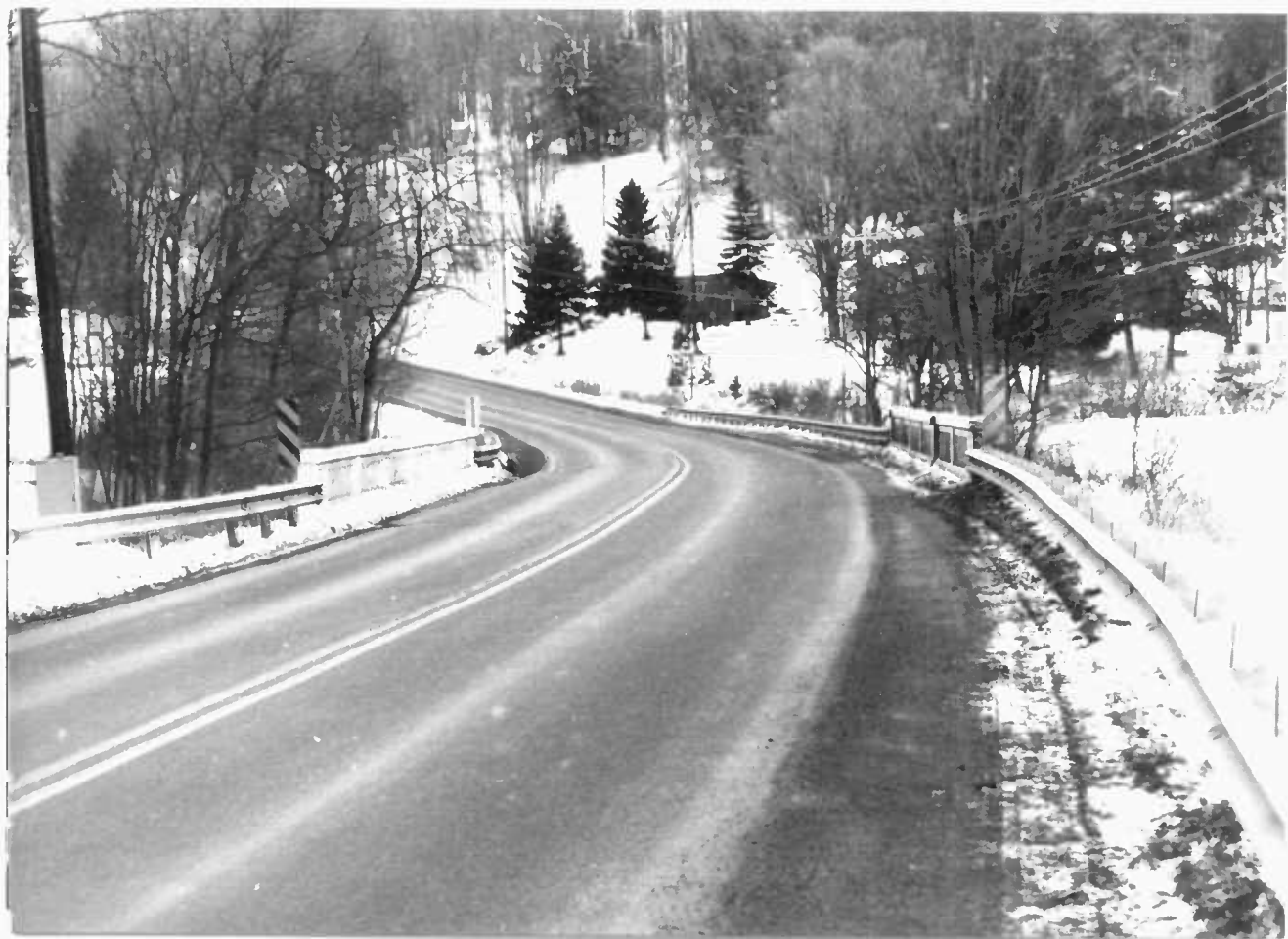
County inspection/bridge files _____ SHA inspection/bridge files X
Other (list): _____

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded August 1995
Name of surveyor Adrienne Beaudet Cowden
Organization/Address P.A.C. Spero & Company; 40 West Chesapeake Avenue, Suite 412;
Baltimore, Maryland 21204
Phone number 410-296-1635 FAX number 410-296-1670

Maryland Historic Highway Bridges
Bridge Type CONCRETE SLABS
Map GRANTSVILLE, A-2
County GARRETT
Bridge # and Name 11025 MD495
OVER BRANCH OF CASSELMAN RIVER





FIELD 1211 MAT#G-II-C-363
OVER CASSELMAN RIVER
GARRETT CO. MD.

DAVE KING

126195

SHA

NORTH APPROACH

1 of 41



WLF ID - 2543 MHT# G-II-C-363

OVER COLEMAN RIVER

GARRETT CO MD

DAVE KIMBLE

11/26/95

SHP

SOUTH APPROACH

2 of 4



324 10112510 MHT# G-II-C-363
DATE 11-1-68

SECRET 30. 11

THE KING

11/1/68

11/1

EAST ELEVATION (UPSTREAM)

3-141



BIR# 10112510 MHT# G-II-C-363

W. RIVER

CO. Rd.

DAVE KING

1/26/95

S17A

WEST ELEVATION (DOWNSTREAM)

11 01 4